



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/518,006	12/14/2004	Kauko Janka	43289-211640	6705
26694	7590	07/28/2008	EXAMINER	
VENABLE LLP P.O. BOX 34385 WASHINGTON, DC 20043-9998				HOFFMANN, JOHN M
ART UNIT		PAPER NUMBER		
1791				
MAIL DATE		DELIVERY MODE		
07/28/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/518,006	JANKA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	John Hoffmann	1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 10 June 2008.  
 2a) This action is **FINAL**.                  2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 23,26,28-30 and 32-51 is/are pending in the application.  
 4a) Of the above claim(s) 38-44 is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 23,29,30,32-35 and 45-50 is/are rejected.  
 7) Claim(s) 26,28,36,37 and 51 is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____ .
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date _____.	6) <input type="checkbox"/> Other: _____ .

## **DETAILED ACTION**

### ***Election/Restrictions***

Newly submitted claim 38-44 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

New independent claim 38 (as well as claims 39-44 depending therefrom) is directed to the species as presented by figures 1 and 2 where "the jets from opposite sides...are not directly opposite each other". This is mutually exclusive of the species of figure 3 which has a Lavall/de Laval nozzle with adiabatic expansion and the jets directly opposite each other. Claims directed to the species/invention of figure 3 were previously presented (claims 29-30), searched and examined. No claims directed to the specie of figures 1-2 were previously presented, searched or examined. Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. To now have to search and examine this new mutually exclusive specie (never before searched for or examined) would place a unreasonable burden on the Office.

Accordingly, claims 38-44 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

### ***Claim Objections***

Claims 26, 28, 36, 37 and 51 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Claims 26, 28, 36 and 37 depend from claim 25. But claim 25 has been

cancelled, thus it cannot be said to be a previous claim. Claim 51 depends from itself, not a previous claims. These claims are not further treated on their merits.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 23, 29, 30, 32-35 and 45-50 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Independent claim 23: Examiner could not find support for the invention as claimed. Most notably the limitation "that a supersaturated state of the base material, dopant and at least one oxidant gas is reached". There is neither explicit nor implicit support for such. For example, the oxidant gas (e.g. oxygen or carbon dioxide, page 9, line 31) requires cryogenic temperatures for supersaturation. There is nothing that reasonably suggest that anything in the method has cryogenic temperatures.

Independent claim 45: Examiner could not find support for the limitation that the jets are disposed at a periphery of the de Laval nozzle. As shown on at figure 3, and disclosed at page 10, lines 20-25 the gas is introduced at the narrowest portion of the nozzle. Examiner's dictionary reports a definition of "periphery" as "the external

boundary or surface of a body". The jets of figure 3 are clearly not at an external boundary/surface of the nozzle. The subject matter relating to the jets being disposed at a periphery was not described in the specification in such a way as to reasonably convey that inventors had possession of the entire scope of placement at any "periphery".

To put it another way: even if somehow there is a definition for "periphery" that encompasses the narrowest portion, the term "periphery" is much larger in scope than that. Such a single embodiment (i.e. the narrowest portion) does not support a much broader generic "periphery" as presently claimed.

As pointed out in MPEP 2163:

The Federal Circuit has explained that a specification cannot always support expansive claim language and satisfy the requirements of 35 U.S.C. 112 "merely by clearly describing one embodiment of the thing claimed." *LizardTech v. Earth Resource Mapping, Inc.*, 424 F.3d 1336, 1346, 76 USPQ2d 1731, 1733 (Fed. Cir. 2005). The issue is whether a person skilled in the art would understand applicant to have invented, and been in possession of, the invention as broadly claimed. In *LizardTech*, claims to a generic method of making a seamless discrete wavelet transformation (DWT) were held invalid under 35 U.S.C. 112, first paragraph because the specification taught only one particular method for making a seamless DWT and there was no evidence that the specification contemplated a more generic method. See also<*Tronzo v. Biomet*, 156 F.3d at 1159, 47 USPQ2d at 1833 (Fed. Cir. 1998), >wherein< the disclosure of a species in the parent application did not suffice to provide written description support for the genus in the child application.

There is no support for the boron (claims 43 and 51).

There is no support for the claim 45 requirement that the dopant comprises a solution. Although there is disclosure that the dopant is in a solution, the solution is not the dopant. The solution is not in the final glass product, thus it is not reasonable to call

it a dopant. This makes it confusing in other claims like 50 and 35. It is unclear whether they are suppose to be further dopants or what. One element corresponds to one dopant. There is no definition recognized in the prior art (as far as examiner can tell) for "dopant" which means "dopant" can be a solution, or plural dopants.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 35: the term "borium" is indefinite as to whether it means barium, boron, thorium or something else. Also, claim 23 already stipulates that the dopant is a rare earth. It is not understood what is meant by the dopant is Al, P borium and/or F. If any of these is in the glass, they would be a further dopant, not "the dopant".

### ***Response to Arguments***

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Although there is no prior art rejection, such is not to be taken as an indication of allowable subject matter. No prior art rejection is made because the prior art does not

teach or suggest the features that are now claimed but are not supported by specification (as set forth in the rejection under 35 USC 112 -first paragraph.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Hoffmann whose telephone number is (571) 272 1191. The examiner can normally be reached on Monday through Friday, 7:00- 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

John Hoffmann  
Primary Examiner  
Art Unit 1791

jmh/John Hoffmann/  
Primary Examiner, Art Unit 1791